



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/597,631

08/02/2006

Asaf Evenhaim

4214

24271 7590 11/09/2009  
JOHN ALEXANDER GALBREATH  
2516 CHESTNUT WOODS CT  
REISTERSTOWN, MD 21136

EXAMINER

MOORTHY, ARAVIND K

ART UNIT

PAPER NUMBER

2431

MAIL DATE

DELIVERY MODE

11/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,631	<b>Applicant(s)</b> EVENHAIM, ASAF	
	<b>Examiner</b> ARAVIND K. MOORTHY	<b>Art Unit</b> 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is in response to the communications filed on 16 July 2008.
2. Claims 1-13 are pending in the application.
3. Claims 1-13 have been rejected.

#### ***Information Disclosure Statement***

4. The examiner has considered the information disclosure statement (IDS) filed on 2 August 2006 and 16 July 2008.

#### ***Specification***

5. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2431

7. Claims 1-4, 9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Zamora U.S Patent No. 4,965,763.

As to claim 1, Zamora discloses a Privacy Preserving Data-Mining Protocol, operating between a secure "aggregator" data processor and at least one of "source-entity" data processor, wherein the "aggregator" and the "source-entity" processors are interconnected via an electronic data-communications topology, and the protocol includes the steps of:

A) on the side of the "aggregator" processor: (i) from a user interface--accepting a query against a plurality of the predetermined attributes and therewith forming a parameter list [column 5, lines 22-53], (ii) via the topology--transmitting the parameter list to each of the "source-entity" processors [column 5, lines 22-28], (iii) via the topology--receiving a respective file from each of the "source-entity" processors [column 5, lines 43-54], (iv) aggregating the plurality of files into a data-warehouse [column 11, lines 25-41], (v) using the parameter list, extracting query relevant data from the data-warehouse [column 6, lines 1-16], (vi) agglomerating the extract [column 12, lines 10-19], and (vii) to a user interface--reporting the agglomerated extract [column 6, lines 17-25]; and

B) on the side of each processor of the at least one "source-entity" processors: (i) accumulating data-items wherein some of the data-items have privacy sensitive micro-data [column 10, lines 9-25], (ii) organizing the data-items using the plurality of predetermined attributes [column 6, lines 28-41], (iii) via the topology--receiving a parameter list from the "aggregator" processor [column 5, lines 22-53], (iv) forming a file by "crunching together" the data-items

Art Unit: 2431

according to the parameter list [column 9, lines 21-31], (v) filtering out portions of the file which characterize details particular to less than a predetermined quantity of micro-data-specific data-items [column 37, lines 5-49], and (vi) via the topology--transmitting the file to the "aggregator" processor [column 11, lines 49-60].

As to claim 2, Zamora discloses that transmitting the parameter list includes transmitting a sufficiently large list of identity disclosing specifics [column 5, lines 5-19].

As to claim 3, Zamora discloses that agglomerating the extract includes filtering out portions of the extract which characterize details particular to less than a predetermined quantity data-items [column 6, lines 42-51].

As to claim 4, Zamora discloses that filtering out portions of the extract which characterize details particular to less than a predetermined quantity data-items includes the predetermined quantity being selected from the list, ordinal number, percentage of instances in the data-warehouse, data instances outside of mean plus predetermined number of standard distribution units [column 5, lines 5-19].

As to claim 5, Zamora discloses that agglomerating the extract includes filtering out portions of the extract so that only identity-free micro-data remains [column 37, lines 5-49].

As to claim 9, Zamora discloses that filtering out portions of the file which characterize details particular to less than a predetermined quantity of micro-data-specific data-items includes selecting the predetermined quantity from the list, an ordinal number, a percentage of instances in the data-warehouse, data instances outside of statistical mean-or-median plus-and/or-minus a predetermined number of standard deviation units [column 31 line 18 to column 32 line 17].

Art Unit: 2431

As to claim 11, Zamora discloses a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for "aggregator" data processor functions in a Privacy Preserving Data-Mining Protocol, said method steps including: (i) from a user interface--accepting a query against a plurality of the predetermined attributes and therewith forming a parameter list [column 5, lines 22-53], (ii) via an electronic data-communications topology--transmitting the parameter list to at least one "source-entity" processors [column 5, lines 22-28], (iii) via the topology--receiving a respective file from each of the "source-entity" processors [column 5, lines 43-54], (iv) aggregating the plurality of files into a data-warehouse [column 11, lines 25-41], (v) using the parameter list, extracting query relevant data from the data-warehouse, (vi) agglomerating the extract [column 12, lines 10-19], and (vii) to a user interface--reporting the agglomerated extract [column 6, lines 17-25].

As to claim 12, Zamora discloses a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for "source-entity" data processor functions in a Privacy Preserving Data-Mining Protocol, said method steps including: (i) accumulating data-items wherein some of the data-items have privacy sensitive micro-data [column 10, lines 9-25], (ii) organizing the data-items using the plurality of predetermined attributes [column 6, lines 28-41], (iii) via an electronic data-communications topology--receiving a parameter list from an "aggregator" processor [column 5, lines 22-53], (iv) forming a file by "crunching together" the data-items according to the parameter list [column 9, lines 21-31], (v) filtering out portions of the file which characterize details particular to less than

Art Unit: 2431

a predetermined quantity of micro-data-specific data-items [column 37, lines 5-49], (vi) via the topology--transmitting the file to the "aggregator" processor [column 11, lines 49-60].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zamora U.S Patent No. 4,965,763 as applied to claim 1 above, and further in view of Hart et al U.S. Patent No. 6,269,404 B1 (hereinafter Hart).

As to claim 6, Zamora does not teach that accepting a query includes performing a preprocessing privacy check against a predetermined source-entity data-ensemble model.

Hart teaches conducting a privacy check by using a privacy checking algorithm [column 8, lines 56-64].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora so that a privacy check would have been conducted by using a privacy checking algorithm against a predetermined source-entity data-ensemble model.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora by the teaching of Hart because it improves flexibility of network architectures by managing the flow of traffic within virtual LANs [column 4, lines 53-55].

Art Unit: 2431

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zamora U.S Patent No. 4,965,763 as applied to claim 1 above, and further in view of Terada et al U.S. Patent No. 5,794,042 (hereinafter Terada).

As to claim 7, Zamora does not teach that "crunching together" the data-items includes joining data-items having a mutual micro-data-specific.

Terada teaches joining data items having mutual data [column 21, lines 11-51].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora so that "crunching together" the data-items would have included joining data-items having a mutual micro-data-specific.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora by the teaching of Terada because it increases efficiency in software development [column 1, lines 60-61].

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zamora U.S Patent No. 4,965,763 as applied to claim 1 above, and further in view of Chaudhuri et al US 2004/0260694 A1 (hereinafter Chaudhuri).

As to claim 8, Zamaora discloses selected from the list of sub-steps aggregating, extracting, agglomerating, accumulating, organizing, and crunching (i.e. organizing) [column 6, lines 28-41].

Zamora does not teach that at least one sub-step includes fuzzy matching.

Chaudhuri teaches fuzzy matching and the benefits of using such [0028].

Art Unit: 2431

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora so that there would have been organizing and fuzzy matching as sub-steps.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora by the teaching of Chaudhuri because it provides a strong foundation for adding domain-specific enhancements [0010].

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zamora U.S Patent No. 4,965,763 as applied to claim 1 above, and further in view of Chan U.S. Patent No. 7,111,237 B2.

As to claim 10, Zamora does not teach that accepting a query includes transforming the query into a standardized query-capable of resulting in a syndicated reporting of the agglomerated extract.

Chan teaches transforming a query into a standardized query [column 6, lines 33-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora so that accepting a query would have included transforming the query into a standardized query-capable of resulting in a syndicated reporting of the agglomerated extract.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Zamora by the teaching of Chan because it enables a user enters a search entry in a language other than the principal language used in the document to be searched and automatically highlights each matching phrase or matching object in the search

Art Unit: 2431

result with a callout or bubble which contains an artificial intelligence based bilingual annotation on the matching phrase or matching object [column 3, lines 41-48].

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARAVIND K. MOORTHY whose telephone number is (571)272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aravind K Moorthy/  
Examiner, Art Unit 2431